PERFORMANCE WORK STATEMENT

TASK ORDER ID: ID05160001
PROJECT TITLE: Enterprise Data Collection Layer (EDCL) Sustainment
CLIENT: Headquarters (HQ) Air Force Materiel Command (AFMC)
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Executive Summary

Enterprise Data Collection Layer (EDCL) architecture is a critical services-oriented architecture (SOA) layer that resides between the data collection devices at the point of supply chain events and the back-end automatic information systems (AISs), future capability initiatives (CIs) and enterprise data repositories. It is not a DOD business system. EDCL leverages the Global Combat Support System-Air Force (GCSS-AF) architecture and existing capabilities to accomplish this service architecture. EDCL components manage the business rules and communications between automated data collection (ADC) devices, Air Force (AF) network/security, data, and processes that enable near real-time information and event management.

This contract effort will maintain the existing EDCL architecture, manage additional EDCL releases that support the functional customers and/or additional capabilities, as well as update or modernize the existing architecture and components to enable EDCL to support the latest iOS, Android, and/or Windows Mobile Devices.

1.0 GENERAL INFORMATION

1.1. Background

The Air Force (AF) recognizes the value of timely and accurate source data to feed legacy automatic information systems (AISs) as well as future capability initiatives (CIs). The most effective way to pass timely and accurate information from one phase of a business process to another (or from one business process to another business process) is by integrating timely information flow associated with those processes.

The Air Force achieves timely and accurate supply chain source data through the proper use of Automatic Identification Technology (AIT) and automated data capture (ADC). This requires enterprise architecture for integrating AIT into existing logistics source data processes in AF AISs and business processes as well as development of new AIT-enabled processes used with future CIs.

Prior to 2010, AF AIT capabilities were tied to specific individual AISs such as supply and equipment maintenance. These unique custom applications relied on local base servers to accomplish the conversion of the source event (receipt, stow, issue, inventory, etc.) to a transaction the AF AIS could understand and process. These custom applications are expensive to develop and maintain. Fielded in 2010, EDCL architecture met the AF vision to manage all

AIT-enabled source data capture including functional mobile applications as a standardized enterprise architectural service on the GCSS-AF framework.

As the enterprise-wide GCSS-AF framework evolved, the AF envisioned the management of ADC as an integral component. The EDCL architecture provides an effective method of transferring source data collected from standardized functional ADC applications to legacy AF AISs and subsequently the AF future CIs. The enterprise architecture will enable use of the full range of AITs including linear bar code, two-dimensional bar code, passive and active Radio Frequency Identification (RFID), as well as specific EDCL certified mobile devices (wireless mobile terminals, AFWAY laptops/tablets, Commercial Mobile Devices (CMDs), printers, RFID portals, light stacks, and motion sensors). The EDCL program has a robust and extensive certification process to add new technology and hardware to the enterprise service. Once added, the hardware and technology is available to all subscribers of the EDCL architecture.
The initial effort culminated in the successful implementation of EDCL version 1.0 in the fall of 2010. Subsequent contracts added additional ADC capabilities and functions at operational locations throughout the AF in Supply, Maintenance, and Munitions.

1.2. Purpose
Under the initial contract, the AF assessed the concept of EDCL, formulated a strategy for its implementation in the AF, and acquired, assembled and tested the components within the GCSS-AF Capability Integration Environment (CIE). The scope included the development of ADC Use Cases, evaluation of many EDCL vendors, design implementation, and testing of the recommended architecture.

This follow-on sustainment contract will maintain EDCL's accreditation and full operation in GCSS-AF Production. This follow-on contract will also enable other applications and integrators to continue to use the EDCL architecture as an ADC Service to process data from the point of collection from the AIT enabled mobile device to the AIS.

EDCL exists in the CIE, a development environment, and within the GCSS-AF production environment. EDCL has a current authority to operate (ATO) and authority to connect (ATC). This effort will cover the necessary activities to support sustainment activities and management of EDCL.

Overall objectives for this effort include:
- Manage/maintain the configuration, implementation, and modification of EDCL architectural components in GCSS-AF and CIE IAW disciplined engineering practices;
- Provide EDCL integration to existing program offices as well as future program offices and CIs that plan to use EDCL services to move data from an AIT-enabled mobile device and fixed AIT infrastructure at the edge (see 2.1.18) to the AIS;
- Manage/maintain the configuration, implementation, and modification of EDCL client software on handheld terminals and SDC work station/devices and other mobile devices using the EDCL services;

- Maintain the documentation for EDCL's architecture components design, services provided, Assessment and Authorization (A&A) artifacts and training materials to include installation and user guides;
- Integrating and performing EDCL certification process for AF AIT PO selected Commercial Off-the-Shelf (COTS) product from the Army's AIT V contract, DoD/AF CMD contracts, and AFWAY eTools offerings;
- Evaluate a move to the MilCloud, as well as, investigate new capabilities that keep pace with changing mobile device and AIT offerings.

1.3. Scope

The scope of this effort builds on the initial EDCL effort and follow-on efforts. This contract effort will maintain the existing EDCL architecture in CIE/GCSS-AF, existing EDCL client software and devices, manage additional EDCL releases that support the functional customers using the EDCL architecture (Combat Ammunition System, Integrated Logistics Support – Supply, Positive Inventory Control of Nuclear Weapons Related Material, Integrated Maintenance Data System, and Item Unique Identification marking and inventory [Field and Depot]), as well as existing or new system interfaces. This contract effort will also evaluate a move to the MilCloud per HAF/A4IS direction, as well as, investigate new capabilities that keep pace with changing mobile device and AIT offerings and the AF Network Integration Center (AFNET). The current contract is a Task Order (TO) on a Federal AIT contract for Hardware and Services managed by the Army Product Director – Automated Movement and Identification Solutions (PD-AMIS).

1.4. Applicable Documents and Government-Unique Training

The Contractor shall develop a framework and specifications for program offices to use for specific capabilities and/or system migration to EDCL architecture in conjunction with GCSS-AF specifications, policy, and procedures. This documentation shall be incorporated within the Contractor's architecture artifacts.

In the development of the framework, the Contractor shall, to the maximum extent possible, ensure compliance with the following publications:

- AFI 10-712, *Telecommunications Monitoring and Assessment Program (TMAP)*
- AFI 23-101, *Air Force Material Management*
- AFI 33-200, *Information Assurance Management*
- AFI 33-210, *Air Force Certification and Accreditation (C&A) Program (AFCAP)*
- AFI 33-401, *Air Force Architecting*
- AFMAN 33-152, *User Responsibilities and Guidance for Information Systems*
- AFMAN 33-153, *Information Technology (IT) Asset Management (ITAM)*
- AFMAN 33-282, *Computer Security (COMPUSEC)*
- AFMAN 33-283, *Communications Security (COMSEC)*
- AFMAN 33-285, *Cybersecurity Workforce Improvement Program*
- DoDI 8510.01, *Risk Management Framework (RMF) for DoD Information Technology (IT)*
- DoDI 8520.02, *Public Key Infrastructure (PKI) and Public Key (PK)*
- DoDI 8551.01, *Ports, Protocols, and Services Management (PPSM)*

- DoD Mobility Strategy
- DISA Security Technical Implementation Guides (STIGs)
- MIL STD 130N-1, *DoD Standard Practice Identification Marking of U.S. Military Property*

2.0. SPECIFIC TASK REQUIREMENTS

2.1. CLIN 0001 – Core Labor: The contract shall perform the following task to support HQ AFMC

2.1.1 Task 1 - In support of Air Force AIT developers and integrators that maintain existing AIT applications and to Government organizations, the Contractor shall base its proposed schedule and resources on the following:

- The significant role that GCSS-AF framework and CIE has with the EDCL architecture requires the contractor to have complete and thorough understanding of GCSS-AF and CIE to include implementation, deployment, and sustainment experience;
- Sustainment of EDCL architecture must comply with AF Portal; Authentication/Authorization protocols and network security requirements;
- Sustainment of EDCL architecture must support maximized code reusability and minimized rework;
- Sustainment of EDCL architecture must support maximized use of Government Off-the-Shelf/Commercial Off-the-Shelf (GOTS/COTS) hardware and software;
- Sustainment of EDCL architecture must follow Defense Information Infrastructure (DII) Common Operating Environment (COE) procedures where applicable;
- Although Security portions of assessment and authorization activities will be handled under separate contract, this contract will provide supporting activities and artifacts;
- Sustain an EDCL architecture meeting initiative objectives with hardware and software, utilizing AIT in accordance with international, industry, and DoD standards as applicable;
- Understand Item Unique Identification (IUID) marking of Air Force tangible assets and property by Class of Supply including systems integration, marking and registration, and IUID policy and guidance.

2.1.2. Task 2 - Help Desk Support

The Contractor shall provide continuous Help Desk Tier 2 and Tier 3 support 7-days a week/24 hours a day, 365-days a year for the EDCL architecture and components. Tier 1 support is not provided by the Contractor. Tier 1 support is provided by the EDCL integrators by application/functional PMOs integrating with EDCL (i.e., ILS-S, CAS, etc.); although Tier 1 support for Positive Inventory Control System (PICS) will be covered under this contract. The Contractor shall provide patch management support for multiple software versions, providing technical assistance, training, warranty, and maintenance support for software and hardware, as well as for report deficiencies. The Contractor shall provide methods for responding to customer requests and order processing. The Contractor shall use deficiency reporting tools and establish methods for resolving and closing deficiency reports. The Contractor shall monitor discrepancy reports, provide performance improvement recommendations, identify environmental changes and changes in Government equipment or regulations and make the recommended performance

improvement, environmental, or equipment changes as requested by the Government.
Definitions:

- Tier 2 – Support on EDCL architecture (in conjunction with GCSS-AF) and HHTs/mobile devices
- Tier 3 – Usually subject matter experts, support on complex hardware and OS software issues

2.1.3. Task – 3 Integration Consulting and Outreach

The Contractor shall provide EDCL integration consulting and outreach to AF AIS program offices and their designated AIT Contractor developers supporting existing and future AIT applications and to government organizations involved in AF AIT development. The Contractor shall provide ongoing support to the AF AIT PO with regards to presentation, demonstrations, and project information sharing. Anticipated support includes:

- Technical Interchange Meetings (TIMs), including milestone reviews;
- Conference and program briefings;
- Generation of artifacts for various publications as required;
- Sharing of AIT V contract requirements, knowledge, and expertise.

The Contractor shall develop and deliver minutes (CDRL A005) for all TIMs conducted. Reference CDRL A005.

The Contractor shall provide EDCL integration and consulting outreach to AF AIS program offices and their designated AIT Contractor developers supporting AIT applications as well as their government sponsors. This list includes but is not limited to:

- Vendors
- PMOs; CAS, ILS-S, etc (functionals)
- Application Developers
- GCSS-AF
- CIE
- AFNET
- A6

2.1.4. Task – 4 Disaster Recovery Alternate Site

EDCL enterprise functions are hosted at GCSS-AF; GCSS-AF has in place disaster recovery plans (data backups, software, and installation instructions) to support contingency support, up to but not including catastrophic events, requiring an alternate site.

There is a remote possibility the alternate site would need to be stood up. In case of a catastrophic event at the primary site, the Contractor site shall be used to stand up the alternate site. Resources will already be in place to support development efforts (EDCLNet environment); additional resources will be provided by the Government at that time.

The alternate site is a warm site. It has partial computer hardware, software resources and boundary defense, as well as, power, HVAC, floor space, and communications infrastructure that will be in place; additional resources will be required to bring configuration to partial mission capability. These will be provided by the Government at the time an alternate site will need to be established. Some capabilities of the GCSS-AF security architecture (Tivoli Access Manager and Akami) will not be established at the alternate site.

2.1.5. Task - 5 Configuration Management (CM)

The Contractor shall accomplish Configuration Management (CM) activities as described in the Task Order. CM activities include baseline identification, change control, status accounting, and auditing.

As part of the CM process, the Contractor shall facilitate and participate in a Configuration Control Board (CCB) that is chaired by the AF AIT PO. The Contractor shall track all EDCL change requests, CCB decisions and implementations. The Contractor shall produce and maintain minutes from CCB meetings and all change requests in an approved file plan.

CM is critical to properly develop a release schedule for EDCL and maintain version control. The Contractor shall maintain CM of the EDCL components and business logic, as well as anything developed for use on EDCL.

2.1.6. Task – 6 Development Activities

The Contractor shall provide EDCL architecture development activities to the AF AIT PO for capabilities identified as being needed by multiple AIS or to enhance a core architecture capability within EDCL. The development activities will include the full development life cycle to include but not be limited to design, development, configure, test, and documentation. The Contractor shall develop and implement the following products within EDCL: Oracle Database, Sybase iAnywhere, M-Business Anywhere (server and client), Sybase Ultralight Database, GlobeRanger, and Savi Site Manager.

Anticipated development components include:

- Workflows
- Web Applications
- Web Services
- Synchronization Scripts\Techniques
- Window Services

Throughout the development life-cycle, periodic scheduled and ad hoc informal meetings and formal reviews will be an integral part of the development process. The following are key review events:

- Critical Requirements Review (CDRL A012);
- Critical Design Review (CDRL A013); and
- Test Readiness Review (CDRL A014)

2.1.7. Task – 7 Database Development Activities

The Contractor shall provide EDCL database activities to the AF AIT PO for capabilities identified to support AIS development or to enhance a core capability within the EDCL Integrated Data Model (IDM) (CDRL A004). The IDM is used to house AF AIS reference data moving to and from the mobile devices/application as well as a repository for event transactions coming from the mobile devices destined for the appropriate AF AIS. The development activities will include but not be limited to design, development, performance, test, and documentation. Anticipated development components include:

- SQL Stored Procedures
- SQL Triggers
- SQL Functions
- Synchronization Scripts\Techniques
- Security
- Performance tuning\configuration
- Data Modeling

2.1.8. Task – 8 Reference Data

The inclusion of AIS and other logistics reference data is a critical component of EDCL. Reference data is used to support user experience such as pre-loaded drop down lists, reference tables, and location specific logistics/supply chain data; it is also used to complete/transform transaction data for consumption by AF AISs. Reference data may require the implementation of legacy adapters to existing AF AIS. The Contractor shall coordinate data requirements across the AIT applications to maximize data reuse and minimize data pulls. The Contractor shall:

- Coordinate with AF AIS/AIT application owners and AF AIS designated Contractor integrators for data requirements, sources of data, and frequency of data pulls;
- Design, configure and document proper business logic to retrieve reference data; and
- Test, verify and document business logic

2.1.9. Task – 9 Routing Rules

The EDCL enterprise architecture was developed to facilitate source data collection for AF AISs. Data collection is only valuable if the data collected is delivered accurately and timely to the correct system of record AIS. Routing rules require the implementation of legacy adapters, interface connection via GCSS-AF ESB or a Web Service to establish connections from one data source to another data source, for allowing data between EDCL and the AIS. The Contractor shall coordinate, implement, sustain and document the business logic routing rules for data received from AIT enabled applications using the EDCL architecture as a service. The Contractor shall coordinate and document routing rules across the AIT applications to maximize reuse and minimize rework. The Contractor shall:

- Coordinate with AIT application owners/AF AISs and contracted integrators;
- Design, configure, sustain and document proper business logic to route data; and
- Test, verify and document business logic in the CIE prior to implementing into GCSS-AF production.

2.1.10. Task – 10 Testing Activities

The Contractor shall develop and maintain a comprehensive Test Plan (TP) for the EDCL architecture (CDRL A006). It is critical to exercise every component of EDCL in order to ensure any changes to GCSS-AF and EDCL in terms of technology refresh and network changes do not adversely affect the performance and capability of EDCL or the applications that use EDCL architecture services. The TP shall exercise EDCL in terms of capability as well as capacity. The TP shall have enough fidelity to identify the component or components that are the limiting factors of EDCL capacity. The limiting factor component(s) may be EDCL or GCSS-AF components. The Contractor shall coordinate formal tests of EDCL with the AF AIT PO and provide the results of these tests in the form of a Test Results Report (CDRL A007). Reference CDRL A006 and A007.

The Contractor shall exercise every component of EDCL in order to ensure any changes to GCSS-AF and EDCL in terms of technology refresh and network changes do not affect the performance and capability of EDCL for the current and future EDCL releases.

- Unit testing within the EDCL Architecture
- Functional Application Testing within the EDCL Architecture
- Integration Testing within the EDCL Architecture
- Integration Testing outside of the EDCL Architecture
- Regression Testing within the EDCL Architecture
- Acceptance Testing of AIT Applications

2.1.11 Task – 10 Subpart 1 AIT Application Testing

The Contractor shall work with the AF AIS Program Offices and their designated contractor developer of the AIS and AIT capability to perform internal testing of the EDCL device management, business rules management, and communications between ADC devices, networked systems, data, and processes, enabling real-time information and event management. Testing is a multi-step process to be accomplished in the Development, Integration zones of the CIE and the pre-production zone of GCSS-AF prior to deployment into GCSS-AF production.

- ***Define test objectives***. The Contractor shall assist the developer of the selected application to establish test objectives based on the Migration Specifications. A successful test will demonstrate mission capability through the Government approved test plan.
- ***Develop a Test Plan***. The Contractor shall review the developer's software test plan (STP)to ensure that it addresses function, performance, and interfaces. It shall be supported by procedures and test data requirements where applicable. It shall detail test parameters, test cases, and test data. Test prototypes and paradigms shall provide building blocks for test scripts. It shall provide general interfaces for test navigation, browsing, and data I/O. Test traceability ensures that tests validate architectural functionality against specification requirements. The Contractor shall develop test plans and provide results in an IDM format (CDRL 0004).

- ***Conduct test***. The Contractor shall assist the developer to conduct internal user functionality testing, integration testing, interface simulation, single-user simulation, multiple-user simulation, and communications testing.
- ***Record test results***. The Contractor shall assist the developer to record results for each test case and test scripts, problems and issues encountered, and what corrective measures were identified. The Contractor shall review the developer's Test Results Report for accuracy and completeness.

2.1.11. Task - 11 Research and Recommend Alternative Hosting Site
Although the EDCL architecture works well within the GCSS-AF framework, the AF has shown interest in moving EDCL to a cloud architecture. The Contractor will develop an Analysis Report (CDRL A011) to evaluate various cloud hosting options for an EDCL architecture. Some of the EDCL components may need to be changed or replaced in order to accomplish the migration to a cloud hosting architecture. Interviews with current EDCL customers (AF AIS Program Managers) and future CI program offices will be conducted by the Contractor to ensure the Analysis of Alternatives (AOA) has the view from current and future customers.

2.1.11.1. Task - 11 Subpart 1 Mobile Application Development Platform
In addition to the report in 2.1.11., the Contractor will develop an Analysis Report (CDRL A011) to evaluate various mobile application development platforms and will be responsible for implementing the chosen platform for use within the EDCL architecture. The development platform will need to support Windows (SDC) Tablet devices, the legacy WinMobile devices as well as Android and/or iOS devices. The platform will also need to be able to reside inside GCSS-AF along with any future cloud architecture solutions. The platform will provide support to integrators for developing capabilities with CAC and network authentication, disconnected data storage operations, linear and 2D barcode scanning, and RFID scanning/reading with the ability to deliver a secure, highly scalable business and mobile applications to supported devices. Interviews with current EDCL customers (AF AIS Program Managers) and future CI program offices will be conducted by the Contractor to ensure the AOA has the view from current and future customers.

2.1.12. Task – 12 Evaluate New and Evolving AIT Enabled Hardware
The Contractor will evaluate emerging COTS AIT enabled mobile devices for inclusion in the EDCL hardware certification process. The evaluation reports will be presented to the AF AIT PO during the monthly Interim Program Reviews (IPRs).

2.1.13. Task – 13 AIT Enabled Device Performance Testing
EDCL is an architecture that supports the transfer of source data from the point of use, yet many factors affect the performance of getting the source data through the base network security, AFNET security, and GCSS-AF Security. Performance varies from base to base and function to function at a base. The Contractor will develop a testing application that exercises the communications path from the moment the two factor authentication is entered (currently CAC and PIN) until the test application is logged into the test application through AFNET to GCSS-AF Tivoli Access Manager (TAM) and a standardized data load sync is accomplished successfully. For AIT Enabled mobile devices that do not connect to GCSS-AF through

AFNET, the alternate path must be identified and accredited for use by the AF to send and receive data to GCSS-AF. The Contractor shall develop a report to communicate the timing of each segment during the login process for AIT enabled mobile devices that are currently certified for use by the EDCL architecture. The Contractor shall maintain and troubleshoot store-forward capability of the AIT enabled mobile devices.

2.1.14. Task – 14 Mobile Device Troubleshooting
The Contractor shall assist current and future EDCL customers (AF Program Offices) with troubleshooting AIT enabled mobile device connectivity issues to the AFNET and connecting to EDCL in GCSS-AF. Mobile devices may include handheld terminals (Windows, Android, or Apple) and handheld RFID readers. This may include travel to specific bases experiencing connecting/syncing issues.

The Contractor shall develop updates to address issues as they arise to maintain operations in compliance with security directives, address deficiencies, and maintain compatibility with the Air Force Infrastructure.

The Contractor shall assist current and future EDCL customers (AF Program Offices) with troubleshooting the EDCL software stack on the mobile device.
The Contractor shall provide detailed usage data and performance metrics regarding the use of mobile devices.

2.1.15. Task – 15 Mobile Device Antivirus The Contractor will provide Symantec Antivirus licensing (or similar software) for devices not supported by Air Force or DISA Enterprise licensing (e.g., Windows Mobile Handheld Terminals)

2.1.16. Task – 16 Application Support. The Contractor shall support several key areas within the EDCL software (e.g., CAS, POMX, etc.) coupled with EDCL testing and integration. When requested by the EDCL Management Team (and/or AIT PO), the Contractor shall provide the following:

- Work with the functional community to generate Problem Reports (PRs)
- Provide software modifications support based upon PRs
- Work with the functional community to conduct acceptance testing
- Work with the functional community to understand future requirements
- Develop software documentation to include user/admin guides, training aids, etc.

2.1.16.1 Task – 16 Application Support for PIC modification. The Contractor shall provide application support, including modification, to enhance the PIC product-specify EDCL software application, including and coupled with EDCL testing and integration. Also, develop supporting documentation to include user/admin guides, training aids, etc. To include the following:

- Adding condition code field to PIC ADC on the “Edit” and “Induction” screens.
- The ability to delete and/or change data in PIC ADC.
- CAC verification that identifies the person who is conducting the inventory.
- When PIC ADC reports are generated, the person conducting the inventory should be included on the report.

- PIC ADC reports must include the item quantity, date of inventory, warehouse location, and item condition codes.
- When conducting inventories, if incorrect data is entered, the user must receive an error notification. Or, a business rule must be established to validate data as it's entered at the HHT.
- When conducting inventories, users must have a means of canceling an entry in the event that an incorrect label is scanned. (NWRM has multiple barcodes when arriving into the NSF and therefore mistakes are easily made when scanning.)
- After an inventory is complete, users must have the ability to reconcile the data between multiple HHTs then with existing inventory in PIC ADC. When performing the reconciliation, PIC ADC must identify any discrepancies.
- The Nuclear Storage facility at Hill AFB has a requirement to automate their current manual inventory processes. The NSF has a requirement to conduct "blind" inventories two times per year and estimates that automating the process will cut their inventory times by 50%. They are not interested in using RFID capabilities, but want to leverage IUID. Currently, all items have an IUID tag that can be read for inventory purposes. Their current process for inventory includes dual entry of item data into PIC ADC, as well as item counts into AF DSS. The NSF wants to continue use of PIC ADC with some modifications to the reporting and information captured within the application.
- This update will result in tighter control of NWRM parts and improve the efficiency of personnel responsible for maintaining control of them.

2.1.16.2 Task – 16 Application Support for TRIAD modification. The Contractor shall: provide the following:

- Enable the EDCL capability (working with TRIAD) to sync without a CAC inserted into the IUID marking carts (background syncing TRIAD database using a soft cert similar to what EDCL uses at the NSF for passive RFID reader).
- Create a TRAID Marking Statistical report (working with Monode) for inclusion into the EDCL Report Console website.
- Support the transition of marking data from three Hill AFB Monode carts to the IUID Registry (sync data on TRIAD through EDCL).
- Support the addition of two controllers/computers to the hardware/software baseline of EDCL to assist the ALCs in ordering the correct replacement computers for their TRIAD marking carts.

2.1.17. Task – 17 Fixed Device Support

The Contractor shall assist current and future EDCL customers (AF Program Offices) with integrating, installing and troubleshooting AIT enabled fixed device connectivity issues to the AFNET and connecting to EDCL in GCSS-AF. Fixed AIT devices may include flatbed bar code scanners, active RFID readers, passive RFID readers, motion sensors, scales, or any other devices that automatically collect data and require the data to be transmitted back to the appropriate AIS. This may include travel to specific bases experiencing connection problems with Air Force wired and/or wireless infrastructure.

The Contractor shall develop updates to address issues as they arise to maintain operations in compliance with security directives, address deficiencies, and maintain compatibility with the Air Force Infrastructure.

2.1.18. Task – 18 Edge Service Support

The Contractor shall assist current and future EDCL customers (AF Program Offices) with integrating, installing and troubleshooting EDCL Edge Services to the AFNET and connecting to EDCL in GCSS-AF. EDCL Edge Services are any capability used at the edge to manage AIT enabled fixed devices and process through the Edge Device and Edge Process Management business logic to transmit data using EDCL to AIS. This may include travel to specific bases experiencing failures or requiring support of the EDCL Edge Services to perform on-site maintenance and troubleshooting.

2.1.19. Task – 19 RFID Support Services

The Contractor shall provide RFID services support to current and future EDCL customers (DoD Program Offices). Support may include, but is not limited to: site surveys, disposition of installed RFID hardware, installation (aRFID and pRFID to include infrastructure updates to communications wiring, wireless LAN updates/extensions, electrical service, trenching, bollards, portals, National Electrical Manufacturing Association (NEMA) enclosures and network switch configuration) testing, and integration of RFID data within the EDCL architecture.

2.1.20. Task – 20 Application Documentation

Upon completion of internal testing, the Contractor shall review the developer's application documentation, including: Installation Instructions (CDRL A001) (i.e., User manuals, troubleshooting guides, etc.), Common Services Findings Report (CDRL A002), and Training Materials (CDRL A003) to ensure that the resulting migrated application conforms to the Release Specifications. Reference CDRL A001, CDRL A002, CDRL A003

2.1.21. Task – 21 Milestone Reviews

Throughout the initial implementation life-cycle, periodic scheduled and ad hoc informal meetings and formal reviews will be an integral part of the release process. The following are key review events:

- Critical Requirements Review (CDRL A012);
- Critical Design Review (CDRL A013);
- Test Readiness Review (CDRL A014); and
- Evaluation Review (CDRL A015)

The Contractor shall participate in all of the developer's milestone reviews. Following the execution of the proof of concept initial implementation, the Contractor shall lead the Evaluation Review, including an appraisal of the users' and GCSS-AF's assessment of the AIT enabled application, EDCL impact on business processes, testing results, application documentation, conformance to the EDCL Master Plan's Integrated Master Schedule (IMS) (CDRL A008), and conformance with the Release Specifications. It will also address recommended release process improvement opportunities. The Contractor shall include these recommendations in the Monthly IPR Report (CDRL A010).

In addition, progress will be addressed during the developer's weekly status meetings (weekly status meeting minutes) (CDRL A009), monthly IPRs (CDRL A010), and periodic TIMs (CDRL A005).

2.1.22. Task – 22 Mobile Device Management
The Contractor shall work with AFSPC and/or DISA to research and implement Mobile Device Management (MDM).

2.1.23. Task – 23 Cyber Security
The Contractor shall ensure that all system or application deliverables meet the requirements of DoD and AF Cyber Security policy. Furthermore, the Contractor shall ensure that personnel performing cyber security workforce activities obtain, and remain current with; required certifications to include software developers/engineer programmers/system administrators (see 5.10).

2.1.23.1 Task – 23 Subpart 1 Systems and Application Cyber Security
The system is deployed to GCSS-AF, which provides an Infrastructure as a Service (IaaS) environment, and thus inherits existing network security controls within the enclave. System and application security assurance is required. The Contractor shall ensure that all system and application deliverables comply with Defense Information Systems Agency (DISA) Application Security Development Security Technical Implementation Guides (STIGs), which includes the need for source code scanning to mitigate vulnerabilities. The Contractor shall provide artifacts required to maintain Assessment and Authorization (A&A) compliance IAW applicable DoD and AF policy and instruction (CDRL A016). The contractor shall also support activities and meet the requirements of DoDI 8520.02, *Public Key Infrastructure (PKI) and Public Key (PK) Enabling*, in order to achieve standardized, PKI-supported capabilities for biometrics, digital signatures, encryption, identification and authentication.

3.0. QUALITY. Both the Contractor and Government have responsibility, for providing and ensuring quality services, respectively

3.1. Quality Control. The Contractor shall establish and maintain a complete Quality Control Plan to ensure the requirements of this contract are provided as specified in accordance with the applicable Inspection of Services Clause. The Contracting Officer (CO) will notify the Contractor of acceptance or required modifications to the plan. The Contractor shall make appropriate modifications (at no additional costs to the government) and obtain acceptance of the plan by the CO. The Government has the right to require revisions of the Quality Control Plan (at no cost to the Government) should the incorporated plan fail to control the quality of the services provided at any time during the contract performance. The plan shall include, but is not limited to the following:

- A description of the inspection system covering all services listed
- The specification of inspection frequency
- The title of the individual(s) who shall perform the inspection and their organizational placement

- A description of the methods for identifying, correcting, and preventing defects in the quality of service performed before the level becomes unacceptable

3.2. Quality Assurance. The Government will perform periodic reviews of the Contractor's performance in accordance with the Government's Quality Assurance Surveillance Plan (QASP) and the Service Delivery Summary (SDS). The Government reserves the right to review services to be provided, including those developed or performed at the Contractor's facilities, to determine conformance with performance and technical requirements. Government quality assurance will be conducted on behalf of the CO. The General Services Administration (GSA) Contractor Officer Representative (COR) will be appointed to coordinate the overall quality assurance of technical compliance.

4.0. DELIVERABLES

4.1. Monthly Status Report (MSR). All Tasks require a MSR. Reports must include, technical progress made, schedule status, meetings attended, issues and recommendations. The MSR is intended to report on, schedule, and performance against PWS requirements, providing information at the CLIN level. As such, it will identify funding compared to ceiling, planned versus actual expenditures, deliverables funded and date they were funded, technical progress made and schedule status per deliverable, deliverables completed within the previous reporting period month, identifying them by title and number, and will indicate what deliverables are scheduled to be delivered during the upcoming reporting period (month/quarter). Specific format and content must be approved by the COR, per the guidance contained herein; status report format should be established no later than the post-award conference. The MSR must be in PDF or PowerPoint format and e-mailed to the COR prior to monthly briefing.

CDRL	Deliverable Title	PWS Ref.	Delivery Date
A001	Installation Instructions (i.e., user manuals, troubleshooting guides, etc.)	2.1.20.	Final delivery NLT 10 working days following review
A002	Common Service Findings Report	2.1.20.	Final delivery NLT 5 working days following review
A003	Training Materials	2.1.20.	As needed or final delivery NLT 5 working days following review
A004	Integrated Data Model	2.1.11.	Final delivery NLT 5 working days following review
A005	TIM Minutes	2.1.3. 2.1.21	Within 5 days of the last day of the TIM

A006	Test Plan (TP)	2.1.10.	Draft delivery NLT 5 working days prior to Test Readiness Review. Final delivery NLT 5 working days following TRR
A007	Test Results Report	2.1.10.	Draft delivery NLT 5 working days prior to testing review. Final delivery NLT 5 working days following review
A008	EDCL Master Plan	2.1.21.	Final delivery of sections and appendices NLT 10 working days following review. Monthly updates as part of the Monthly IPR Report
A009	Weekly Status Meeting Minutes	2.1.21.	Final delivery within 2 days after meeting
A010	Monthly IPR Read-Ahead Materials	2.1.21.	Draft delivery NLT 3 working days prior to IPR meeting
A011	Analysis Report	2.1.11 2.1.11.1	Draft delivery NLT 5 working days after IPR meeting
A012	Critical Requirements Review	2.1.6 2.1.21	As Requested
A013	Critical Design Review	2.1.6 2.1.21	As Requested
A014	Test Readiness Review	2.1.6 2.1.21	As Requested
A015	Evaluation Review	2.1.21	As Requested
A016	Cyber Security Artifacts	2.1.23	As Requested
N/A	Conduct Monthly In-Process Reviews		As Requested
N/A	Conduct Technical Interchange Meetings TIMs	2.1.3	As Requested
N/A	Conduct Testing	2.1.10 2.1.11 2.1.13 2.1.16 2.1.20	As Requested
N/A	Quality Control Plan	3.1 3.2	Due with contractor Proposal
N/A	Monthly Status Report	4.1 8.3	10th Day of the Month with Invoice

N/A	Kick-Off Meeting	5.2	Within 30 Days of Contract Award

4.2. Other Reporting Requirements. In addition to the deliverable requirements identified above, the Contractor shall comply with the following:

- The Contractor shall bring problems or potential problems affecting performance to the attention of the GSA COR as soon as possible. Verbal reports shall be followed up with written reports when directed by the GSA COR within 24 hours.
- The Contractor shall provide in writing the results of all meetings with the client that affect and/or change conditions, or result in additional agreements or requirements to the GSA COR. The Contractor shall not perform any work outside the scope or requirements of this PWS and resultant order without express written approval of the GSA CO.

5.0. PERFORMANCE

5.1. Work is to be accomplished through the GSA Federal Acquisition Service (FAS), Great Lakes Region 5, through its contract with the selected Contractor. Certification by the Government of satisfactory services provided is contingent upon the Contractor performing in accordance with the terms and conditions of the referenced contract, this document, the approved technical and price quotes, and all amendments. The client's representative, GSA's representatives, and the Contractor's representative(s) shall meet when deemed necessary at the client's request. The client representative, the GSA representatives, and the Contractor's representative may meet at the place determined by the client representative and GSA representatives.

5.2. Kickoff Meeting. The Contractor shall initiate work on this task order by meeting with GSA CO and key client agency representatives to ensure a common understanding of the requirements, expectations, and ultimate end products. The Contractor shall discuss the overall understanding of the project and review the background information and materials provided by the client. Discussions will also include the scope of work, deliverables to be produced, how the efforts will be organized and project conducted; assumptions made/expected and results. A concerted effort shall be made to gain a thorough understanding of the client agency expectations. However, nothing discussed in this or in any subsequent meetings or discussions between the client and the Contractor shall be construed as adding, deleting, or modifying any task order requirements, including deliverable specifications and due dates.

5.3. Period of Performance. The base year will be 12 months with one 12 month option period and two 6 month option periods. The period of performance for this requirement is estimated as follows.

Base Year	March 01, 2016 through February 28, 2017
Option Year One	March 01, 2017 through February 28, 2018
6 month Option One	March 01, 2018 through August 31, 2018
6 month Option Two	September 1, 2018 through February 28, 2019

5.3. Place of Performance. Work shall be performed at the Contractor site and as needed at the Government facility. Travel to other Government or Contractor facilities may be required and approval obtained from Contracting Officer's Representative (COR) prior to traveling. In the event any unforeseen or unusual circumstances occur, alternate work locations can be coordinated at the discretion of the COR.

5.4. CLIN 0002 – Travel (Cost Reimbursable). Contractor will be required to travel to participate in conferences, workshops, seminars, etc. Specific location, number of days and number of personnel will vary. All travel must be handled in accordance with the terms and conditions of the contract. Travel must be handled, to include the reimbursement of expenses, in accordance with the terms and conditions of the contract and the Joint Travel Regulation guidance. All non-local travel (non-local travel is defined as outside 45 miles of Wright-Patterson AFB) arrangements will be the responsibility of the Contractor including, but not limited to, airline, hotel, and rental car reservations. The Contractor should make all efforts to schedule travel far enough in advance to take advantage of reduced airfares. The Contractor must stay in Government furnished lodging as available. The Contractor must follow template for travel submissions in accordance with attached Appendix D. Travel Template will need to be filled out and attached in ASSIST at time of invoicing.

The Government can increase or decrease the allotted travel amounts for all performance periods. The task order must include a Not to Exceed (NTE) allowance for reimbursable travel expenses as follows:

Base Period	$25,000.00
Option Period One	$25,000.00
Option Period Two	$13,000.00
Option Period Three	$13,000.00

5.5 CLIN 0003 – Other Direct Costs (Cost Reimbursable). Licenses will be required for the following, under the Other Direct Costs CLIN:

Symantec Antivirus - an annual maintenance fee.

Provided by GCSS-AF, Oracle is the integrated database management software used for storage and retrieval of data within GCSS-AF and provide access to the EDCL Integrated Data base Model.

Globe Ranger - GlobeRanger iMotion products installed at base level manage the local RFID readers and send the tag reads captured to the enterprise GlobeRanger iMotion server operating in the GCSS-AF enclave. The enterprise server also provides business logic engine and take meaningful action based on the transactions received through the use of workflows. Also used on the Enterprise servers to provide the Business Process Execution Layer (workflows) to process data to and from the legacy systems.

Mobile Lighthouse - facilitates the secure connection from HHTs, SDC, and all mobile devices

through GCSS-AF Tivoli Access Manager (TAM) allowing store-forward operations and session persistence.

Savi - is middleware that is tightly integrated with Savi's active RFID hardware (e.g., readers, antennas, portals) to enable configuration and management, as well as sophisticated data collection and filtering.

Sybase Server licenses - Used on the Enterprise servers to provide the data synchronization capability for all of the mobile devices within EDCL architecture. These licenses will be required beginning 1 Oct 16.

Sybase Mobile Device Licenses - Used by all mobile devices within the EDCL architecture to connect to the enterprise synchronization servers. These licenses will be required beginning 1 Oct 16.

The task order will include a NTE cost reimbursable allowance for the licensing and Antivirus expenses as follows:

	Licenses	Antivirus
Base Period	$509,727.00	$75,000.00
Option Period One	$509,727.00	$75,000.00
Option Period Two	$20,000.00	$37,500.00
Option Period Three	$489,727.00	$37,500.00

5.6. Hours of Work. Contractor support shall be available during customer agency normal operating (07:30L AM - 16:30L PM). Work shall generally consist of 40-hour workweeks, Monday through Friday, excluding Federal Holidays. The Government requires contractor work hours to be staggered to meet Government work hours. The Contractor personnel shall observe all Federal holidays. The Contractor shall provide for non-standard duty hours support on an as required basis. Non-standard duty hours and additional hours for work to be performed (to include work beyond the standard 40-hour work week, work on holidays, and work on down days) is very uncommon and shall be coordinated with an authorized Government representative. Such coordination may include the utilization of compensatory time to offset such hours.

5.7. Legal Holidays. The following legal holidays are observed under this contract:

- New Year's Day
- Martin Luther King's Birthday
- President's Day
- Memorial Day
- Independence Day
- Labor Day
- Columbus Day
- Veteran's Day
- Thanksgiving Day
- Christmas Day

Any of the above holidays falling on a Saturday shall be observed on the preceding Friday. Holidays falling on a Sunday shall be observed on the following Monday. Presidential declared holidays may be observed under this contract. If an executive order is issued excusing Federal employees from duty it will be observed as a holiday

5.8. Personnel Retention. The Contractor shall make every effort to retain personnel in order to ensure continuity until contract completion. If it should become necessary to substitute or replace personnel, the Contractor shall immediately notify the GSA COR in writing of any potential vacancies and shall submit the resume(s) of replacement personnel within 14 calendar days of the notification. The Contractor shall submit the resume(s) of all potential personnel selected to perform under this contract to the COR through ITSS for Government review and acceptance/rejection. Upon Government acceptance of a personnel resume(s), the candidate shall be available to begin performance within 14 calendar days. The Contractor shall ensure continuity of operations during periods of personnel turnover and long-term absences. Long-term absences are considered those longer than one week in duration.

5.9. Program Manager: This individual must interact directly with the COR and direct actions of the contract team to effectively meet Government requirements as outlined in this contract.

5.10. 8570 and AFMAN 33-285 Requirement. The performance of the services described in this PWS includes informational functional services for DOD information systems and requires the Contractor to provide appropriately cleared personnel to access DOD Information Systems. Therefore, the Contractor shall comply with instructions provided in DOD 8570.01-M, Information Assurance Workforce Improvement Program, Change 1, 15 May 2008. All contractors must be certified before beginning work on the contract.

Certification Requirements: The on-site Contractor performs Functional Support Administration (FSA) responsibilities that require him/her to meet and maintain training certification requirements for the information assurance functional categories/levels listed:

- Information Assurance Technical (IAT) Level II
- Information Assurance Manager (IAM) Level II
- Information Assurance System Architect and Engineer (IASAE) Level I
- Information Assurance System Architect and Engineer (IASAE) Level II

IAT and IAM Category Training Requirements: The Contractor shall, within the timeframe of the transition period, complete and/or acquire the following training, certification maintenance, continuing education, or sustainment training required for the information assurance functional responsibilities as follows:

- IAT Level II
- IAM Level II
- IASAE Level I
- IASAE Level II

6.0. GOVERNMENT-FURNISHED PROPERTY AND SERVICES. When the COR requires the Contractor to work in a Government facility, the Government will furnish or make available working space, network access, and equipment to include:
Windows PC with Microsoft Office Suite (Outlook, Word, Excel, PowerPoint, etc.).

- Telephone (local/long distance calls authorized as dictated by TO performance requirements)
- Facsimile
- Copier
- Printer

Copies of required Government furnished materials cited in the solicitation, Performance Work Statement (PWS), DD Form 254. All materials will remain the property of the Government and will be returned to the responsible Government Quality Assurance Personnel (QAP) upon request or at the end of the period of performance.

Equipment purchased by the Contractor with the approval of the Government and directly charged to this contract shall be considered Government-owned, Contractor-operated equipment. The Contractor shall conduct a joint inventory and turn in this equipment to the COR upon request or completion of the conduct.

7.0. SECURITY.

7.1. Physical Security: The physical security section is applicable only to personnel performing work on a Department of Defense (DoD) installation.

7.2. Proper Credentials. The Contractor shall ensure their employees and those of their subcontracts have the proper credentials allowing them to work in the applicable country. Persons found to be undocumented or illegal aliens shall be remanded to the proper authorities.

7.3 Clearance. The task order requires all personnel, to include subcontractors and Independent Consultants, performing work on this contract to possess at least a SECRET clearance. Access to classified data/information up to and including Top Secret may be required in the performance of this work. Contractor personnel shall hold the designated clearance level required for a position at the time of appointment/award as indicated by the Government. “Exceptions to the above” will be reviewed and approved by the Government point of contact, the COR. All exceptions will include a justification to include, but not limited to the following: the reason for the exception, what skill is being provided, and why the position cannot be filled with personnel cleared at the designated level.

7.4. Badges: The Contractor is required to provide identification badges for their employees. All Contractor personnel must wear these badges while on duty on the government site. Badges are required to identify the individual, company name, and be clearly and distinctly marked as Contractor. Size, color, style, etc. are to be mutually agreed to by Contractor and government. The Contractor's identification badge will not be used as an entry requirement for installation entry or into any government designated controlled or restricted area.

7.5. Property Protection: Property protection for facility where the Contractors' primary work center is located will be the responsibility of the local facility manager and local Government Security Manager, or their duly authorized representative IAW AFI 31-101, The Air Force Installation Security Program and command/local directives. The Contractor must safeguard all government-owned equipment and materials in his/her possession or use.

7.6. Safeguarding Unclassified and/or For Official Use Only (FOUO) Information:
The Contractor shall meet Air Force standards for storing, processing, and handling unclassified and/or Sensitive but Unclassified (SBU) information and systems. Additionally, all resources (e.g. publication/instructions) provided by the government to assist the Contractor in the performance of their contract shall be surrendered upon termination of employment or the end of the contract performance period.

7.8. Trustworthiness Determination – National Agency Check – Industrial Security Management" Positions of trust require a favorable National Agency Check (NAC). Per Air Force Systems Security Instruction 5027, the Contractors/instructors accessing a government network must, at a minimum, have a completed and favorable NAC. IAW AFI 31-601, Industrial Security Program Management, when Contractors require unescorted entry to restricted areas, access to sensitive unclassified information, access to Government Automated Information Systems and/or sensitive equipment, not involving access to classified information, the Contractor's personnel security questionnaire is processed by the sponsoring Air Force activity per DoD 5200.2-R and AFI 31-501, Personnel Security Program Management.

7.9. Security program and command/local directives: The Contractor shall safeguard all Government-owned equipment and materials in his/her possession or use. The Contractor shall meet Air Force standards for storing, processing and handling classified information and systems.

7.10. Completion of a nondisclosure statement (Attachment A) for each individual is required. The Contractor shall enter into a non-disclosure agreement with other Government contractors as requested by the Government. Any and all information prepared during the performance of these contract services shall have restricted distribution within the selected contractor organization. The Contractor shall release no data or information related to this SOW without the prior authorization of the government.

7.11. Privacy Act. Work on this project may require personnel to have access to Privacy Information. Personnel shall adhere to the Privacy Act, Title 5 of the U.S. Code, Section 552a and applicable agency rules and regulations.

8.0. PROCEDURES FOR PAYMENT.

8.1. Performance Based Payment Percentages. The attached SDS (Attachment B) is provided to identify the performance objectives and respective payment percentages based on relative importance to total task performance. This document also identifies the Government's proposed surveillance assurance methodology.

8.2. Submission. Invoices are due no later than the 10th calendar day of the month following the reporting period. The Contractor shall submit the invoices and supporting documents, through ITSS simultaneously with the MSR (as an acceptance item) to allow the client representative and the COTR to electronically accept and certify services received by the client representative. The Contractor is authorized to invoice only for the services and travel ordered by GSA and provided in direct support of the client's project requirements. In addition, the Contractor shall submit an electronic copy of the invoice to the GSA finance web site by the 15th calendar day of the month following the reported period. The GSA finance submission shall not be submitted prior to the ITSS submission.

8.3. Invoice Content. Firm fixed price invoices of equal amounts (i.e. 12 invoices per each CLIN per each period of performance) for all direct labor shall be submitted monthly with the Monthly Status Report (MSR). The firm fixed price invoices shall also include travel costs for all travel completed during the reporting period. Invoices including travel costs shall include supporting documentation as required by the JTR (receipts for all costs $75.00 or greater) and include G&A charges (if applicable). The invoices shall reflect the current month's charges, a cumulative total and identify the balance of funds remaining on the task through the current performance period (direct labor and travel costs shall be reported separately).

8.3. Payment delay. Failure to comply with the procedures outlined may result in payment being delayed at no additional cost to the Government.

9.0 Personal Service. The client determined that use of the GSA requirements contract to satisfy this requirement is in the best interest of the Government, economic and other factors considered, and the requirement is not being used to procure personal services prohibited by the Federal Acquisition Regulation (FAR) Part 37.104 titled "Personal Services Contract".

10.0. Section 508. All services provided in response to the requirements identified in subject Performance Work Statement shall comply with Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d), and the Architectural and Transportation Barriers Compliance Board Electronic and Information Technology Accessibility Standards (36 CFR part 1194).